

## 7.0 CONCLUSION

If implemented, the Jackson County Lake Project would create a dam and reservoir along either War Fork or Sturgeon Creek in Jackson County. A water transmission main would also be constructed to transport water from the reservoir to the Jackson County Water Association Treatment Plant. Depending on which of the three alternative reservoir sites is selected, the resulting impoundment would range from 116 acres to 475 acres in size. It would yield from 3.5 to 8.5 mgd of untreated water for withdrawal and use by the residential, commercial, and industrial sectors of Jackson County, and in the case of the Sturgeon Creek, 8.5 mgd alternative, for export to neighboring counties. This yield is projected to be sufficient to meet Jackson County's growing water needs to the year 2050. The reservoir would also provide outdoor recreation opportunities for such activities as swimming, boating, camping, hiking, and fishing.

The short-term construction phase of the project would generate a number of temporary, adverse environmental impacts, most of which range from insignificant to moderately significant in magnitude. Adverse, but insignificant, short-term impacts would occur with regard to air quality, noise, and waste management. Moderately significant, short-term adverse impacts would occur in the resource areas of geology and soils, surface and groundwater resources, biological resources, cultural resources, land use, transportation, socioeconomics, and human health and safety. Implementation of the recommended mitigation measures would reduce construction-related adverse impacts on a number of these resource areas.

The construction phase would generate relatively modest economic benefits for Jackson County, which, at the proposed Sturgeon Creek sites, must be weighed against the social and economic cost of relocating existing residents. No impacts on environmental justice from construction are anticipated.

The long-term or operational phase encompasses the duration of the 50-year design life of the proposed dam. A number of impacts, both adverse and beneficial, ranging from insignificant to very significant, would be associated with this phase. Most long-term adverse impacts of the project on geology/soils, surface and groundwater resources, air quality, noise, biological resources, cultural resources, transportation, land use, and waste management would be relatively minor. However, the permanent loss of Prime Farmland at both proposed Sturgeon Creek sites, in a county that does have much farmland, would be considered very significant.

Long-term impacts of the project on recreation, socioeconomics, environmental justice, and human health and safety would all likely be very beneficial.

**THIS PAGE LEFT INTENTIONALLY BLANK**